

## **AMENDMENT TO THE SPECIFICATION**

### **In the Specification:**

Please amend page one of the specification by inserting the following after the title and before the Field of Invention:

-- This is a divisional application of U.S. Patent Application No. 09/525,543, filed March 14, 2000, entitled SYSTEM FOR MONITORING CONNECTION PATTERN OF DATA PORTS, the contents of which are hereby incorporated by reference. --

### **In the Brief Description of Drawings:**

Please amend the paragraph on page 6, lines 19-20, with the following:

FIGS. 5, 5A, 5B, 5C illustrate various other standard cables which can be adapted for use with the present system.

FIGS. 6, 6A, 6B, 6C illustrate various other standard cables which can be adapted for use with the present system.

FIGS. 7, 7A, 7B, 7C illustrate various other standard cables which can be adapted for use with the present system.

### **In the Detailed Description of the Invention:**

Please replace the paragraph beginning on page 7, line 20 with the following paragraph:

-- Now in referring to FIG. 4a-1A, a standard RJ45 cable 3 having a jack 5 is shown.

Although only one end of the cable is shown here in FIG. 4a-1A for illustration purposes, it should be understood that a similar jack is attached to the other end of the cable. The RJ45 jack 5 has eight standard contact points 6. To provide an additional contact point for the scanning operation, an adapter jacket 7, FIG. 4e-1C, is provided which attaches to the RJ45 jack as shown in FIG. 4b-1B. The adapter jacket is attached to the jack 5 at both ends of the cable 3 (though

only one is shown in the figure). The additional contact point for the scanning operation is provided via an external contact 8 located on the outside of the adapter jacket 7. An external conductor wire 9 connects the external contact 8 of the jack 5 at each end of the cable 3 such that the contact 8 at each respective end will be electrically coupled to each other.

Please replace the paragraph beginning on page 8, line 23 with the following paragraph:

-- Referring now to FIG. 3, a simplified schematic illustration of the present system 1 is shown. The adaptor board 14 of FIG 2 is coupled to an output module 18 and input module 19. As shown in more detail in FIG. 4, the output driver module 18 has a plurality of output drivers 20, and the receiver module 19 has a plurality of latches 21-25 (other similar electronic devices can be used instead of latches). Each of the socket contacts 15 is uniquely connected to one output driver 20 and one latch 21-25. The output module 18 and the input module 19 are both coupled to a micro-processor 21 which is in turn coupled to a communication interface 22. The system 1 may be coupled to a local area network 23 or to a computer 24 to report the information regarding connectivity.

Please replace the paragraph beginning on page 9, line 9 with the following paragraph:

-- Both the output module and input module can be implemented using standard IC devices. The main function of the output module 18 is to provide a plurality of output drivers 20 which address adaptor contacts 15 and to send a signal to the contacts 15 when instructed to do so by the micro-processor 21. The main function of the input module 19 is to provide a plurality of latches 21-25 (or other similar devices) which also address the contacts 15 and to receive the signal sent by the output drivers. The communication interface 22 can also be implemented using standard devices currently available to interface between the micro-processor 21 and local area network 23 and electronic devices.

Please replace the paragraph beginning on page 10, line 9 with the following paragraph:

-- Initially, all of the socket contacts 15 are at low state with no signal being sent to them by the output module 18. To monitor the connectivity of the various ports, the ~~micro-controller~~ micro-processor 21 causes the designated first output driver to send out a pulse signal to the socket contact 15 which the ~~micro-controller~~ micro-processor 21 has designated as the first contact. This places the first socket contact at a high state, and consequently, also places the first latch in the input module 19 at the high state. After sending out the signal, the ~~micro-controller~~ micro-processor 21 scans the input module 19 for a latch having a high state. If only the first latch indicates a high, then the ~~micro-controller~~ micro-processor 21 concludes that no valid connection has been made between the first port and another port. If, however, a port other than the first port, port one, indicates a high state, for instance port seven, then the ~~micro-controller~~ micro-processor 21 concludes that the port 1 is validly connected to port seven. Once the connectivity state of port one is determined, the result is stored in memory and the same process is repeated for port two and so on until all of the ports' connection status has been determined.